

Active Interface Modules in booksize format

Overview



Active Interface Modules for 16 kW, 36 kW, 55 kW and 80 kW/120 kW

The Active Interface Modules combine with the Active Line Modules to form a functional unit and are required for operation of the associated Active Line Module. The Active Interface Modules contain a Clean Power Filter and basic interference suppression to ensure compliance with Category C3 in accordance with EN 61800-3 with respect to emitted interference.

The Clean Power Filter protects the mains connection from switching-frequency harmonics. The drive system therefore draws a sinusoidal current from the supply and causes almost no harmonics.

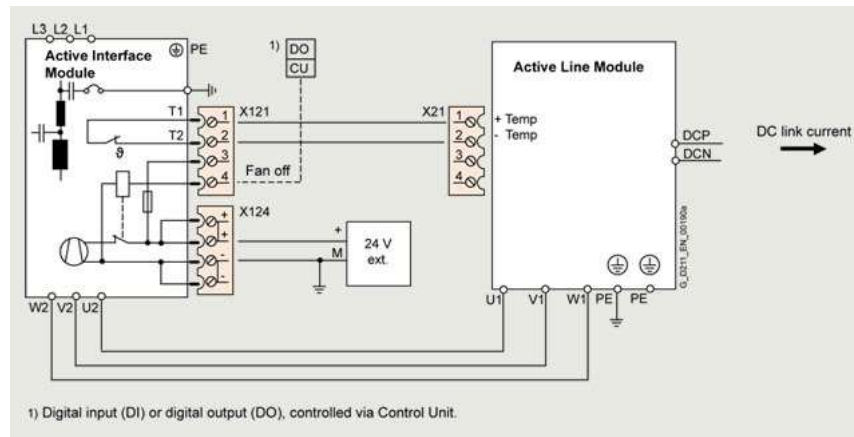
The Active Line Modules in combination with the Active Interface Module can also be operated with supply systems with an isolated star point (IT supply systems).

Design

The scope of supply of the Active Interface Modules includes:

- Connector X21 for temperature evaluation and fan control
- Connector X24 for connecting the 24 V supply for the integrated fan
- DRIVE-CLiQ cable for connecting the Control Unit to the Active Line Module; length of the DRIVE-CLiQ cable = width of the Active Interface Module + 0.11 m (4.33 in)
- Shield connection plate for Active Interface Module 16 kW
- 1 set of warning signs in 30 languages

Integration



Connection example for Active Interface Module

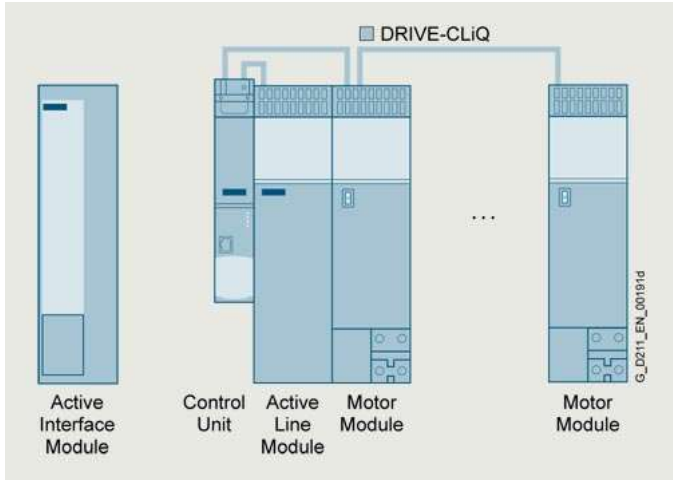
The Active Interface Module requires a 24 V DC supply for operation of the integral fan. The fan rotates after the 24 V DC supply is applied and can, if necessary (service life, noise), be disconnected from the Control Unit over the "Fan off" input. It is only permitted to switch off the fan when the infeed of the drive system is not operating, otherwise the Active Interface Module will overheat.

The thermostatic switch installed in the Active Interface Module is evaluated over the connected Active Line Module.

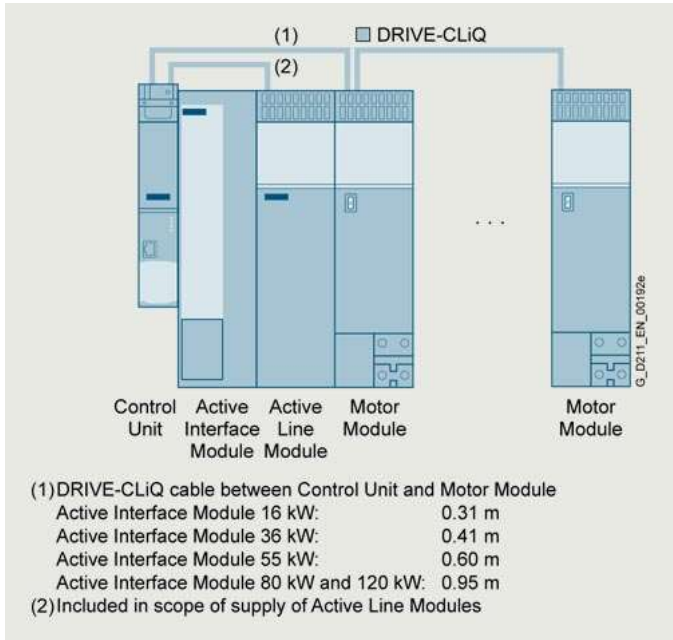
The power cables between the Active Interface Module and Active Line Module must be shielded if limit values for interference suppression are to be complied with. The cable shield can be routed over the shield connection plate (option) to the Active Interface Module or Active Line Module.

Depending on the position of the Active Interface Module in the drive system, additional DRIVE-CLiQ cables may be required. If it is separately installed next to the left side of the Control Unit and Active Line Module, no additional DRIVE-CLiQ cables are required. If the Active Interface Module is placed between the Control Unit and Active Line Module, the DRIVE-CLiQ cables supplied with the Active Line Modules are suitable for setting up a line topology, i.e. Active Line Module and all Motor Modules in series on one DRIVE-CLiQ line. If the Active Line Module is connected over a separate DRIVE-CLiQ line, the DRIVE-CLiQ cable marked with (1) must be ordered. A DRIVE-CLiQ cable suitable for connection (2) is included in the scope of supply of the Active Line Module.

For DRIVE-CLiQ cables for different configurations, see section MOTION-CONNECT connection systems.



Separate Active Interface Module



Active Interface Module integrated in the drive line-up

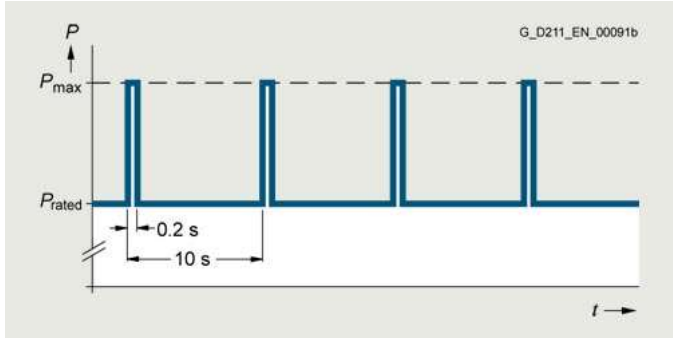
Technical specifications

Line voltage		Active Interface Module				
380 ... 480 V 3 AC		6SL3100-0BE21-6AB0	6SL3100-0BE23-6AB0	6SL3100-0BE25-5AB0	6SL3100-0BE28-0AB0	6SL3100-0BE31-2AB0
Internal air cooling						
Rated current	A	26	58	88	128	192
Current requirement	A	0.25	0.49	0.6	1.2	1.2
24 V DC electronics power supply, max.						
Internal resistance	Ω	1440 ±10 %	1440 ±10 %	1440 ±10 %	1440 ±10 %	1440 ±10 %
Digital input "Fan off" (X21/Pin 4)						
Power loss	kW	0.27	0.34	0.38	0.49	0.585
Cooling air requirement	m³/s (ft³/s)	0.03 (1.1)	0.04 (1.4)	0.083 (2.9)	0.167 (5.9)	0.167 (5.9)
Sound pressure level	dB	57	60	66	68	68
L _{pA} (1 m)						
Line supply/load connection		Connector	Screw terminals	Screw terminals	M8 screw studs	M8 screw studs
L1, L2, L3/U2, V2, W2						
Conductor cross-	mm²	16	50	50	2.5 ... 120 or 2 × 50	2.5 ... 120 or 2 × 50

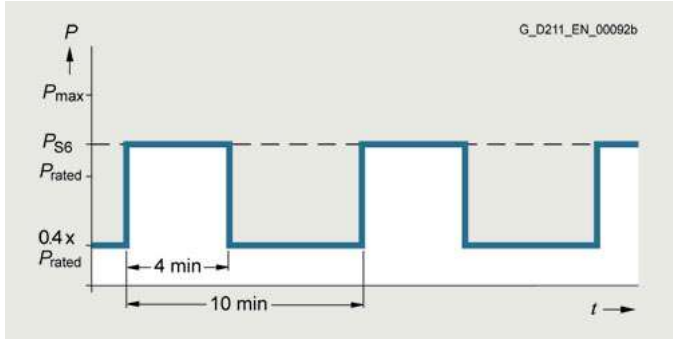
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section						
Thermostatic switch (NC contact)						
• Switching capacity		250 V AC/1.6 A 60 V DC/0.75 A	250 V AC/1.6 A 60 V DC/0.75 A	250 V AC/1.6 A 60 V DC/0.75 A	250 V AC/1.6 A 60 V DC/0.75 A	250 V AC/1.6 A 60 V DC/0.75 A
PE connection		M5 screw	M6 screw	M6 screw	M8 screw	M8 screw
Degree of protection		IP20	IP20	IP20	IP20	IP20
Dimensions						
• Width		mm (in)	100 (3.94)	150 (5.91)	200 (7.87)	300 (11.81)
• Height		mm (in)	380 (14.96)	380 (14.96)	380 (14.96)	380 (14.96)
• Depth		mm (in)	270 (10.63)	270 (10.63)	270 (10.63)	270 (10.63)
Weight, approx.		kg (lb)	11.6 (25.6)	19 (41.9)	23.2 (51.2)	31.9 (70.3)
Certificate of suitability			cURus	cURus	cURus	cURus
Suitable for Active Line Module in booksize format		Type	6SL3130-7TE21-6AA4	6SL3130-7TE23-6AA3	6SL3130-7TE25-5AA3	6SL3130-7TE28-0AA3
• Rated power of the Active Line Module		kW (hp)	16 (18)	36 (40)	55 (60)	80 (100)
					120 (150)	

Characteristic curves

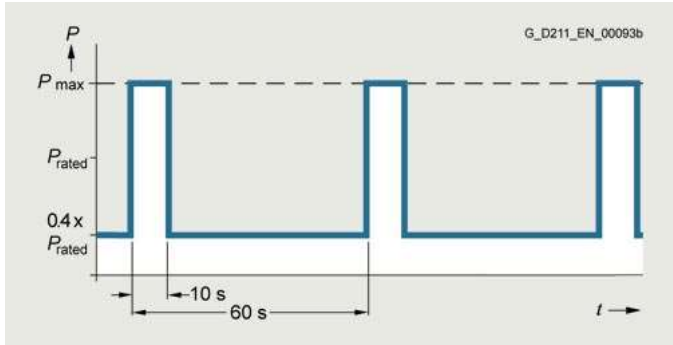
Overload capability



Duty cycle with previous load

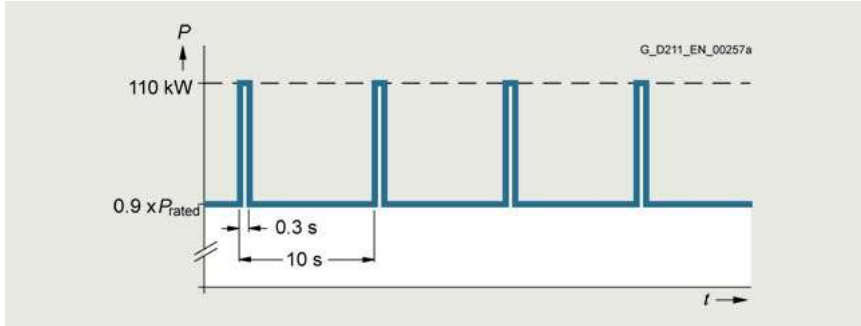


S6 duty cycle with previous load



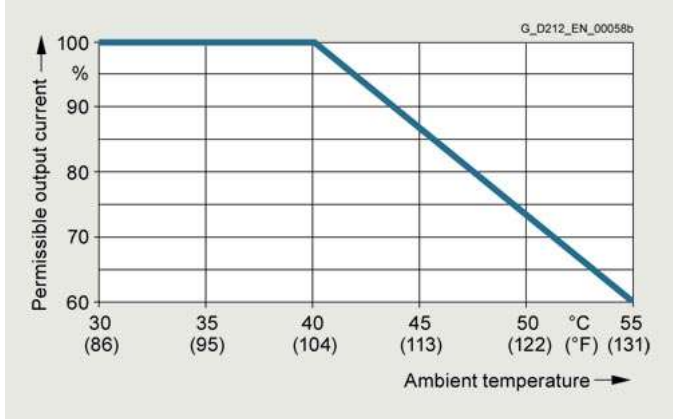
S6 duty cycle with previous load

55 kW Active Line Module only:



Peak power load duty cycle with previous load

Derating characteristics



Output power as a function of ambient temperature

Installation altitude

- >1000 ... 4000 m (3281 ... 13124 ft) above sea level
 - Reduction of the output current by 10 % per 1000 m (3281 ft), or
 - Reduction of the ambient temperature by 5 °C (9 °F) per 1000 m (3281 ft)
- >2000 ... 4000 m (6562 ... 13124 ft) above sea level
 - Operation on line supply systems with grounded neutral point, or
 - Operation with an isolating transformer with secondary grounded neutral point

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